



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,702	09/12/2005	Conrad Fricke	12400-026	2541
757 7590 09/04/2007 BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			EXAMINER BROWN, DREW J	
			ART UNIT 3616	PAPER NUMBER
			MAIL DATE 09/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/520,702

Applicant(s)

FRICKE ET AL.

Examiner

Drew J. Brown

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 1/5/05 (preliminary amendment).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                        |                                                                   |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/15/06 &amp; 1/5/05</u>                                      | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 5 is objected to because of the following informalities: In lines 2 and 3 of claim 5, "wherein one or more of the end-outlet and side-outlet apertures is arranged to direct gas along the flow passage is arranged to direct" should be changed to --wherein at least one of the end-outlet and side-outlet apertures arranged to direct gas along the flow passage is arranged to direct. Appropriate correction is required--.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Because claim 9 is dependent upon claim 8, it is unclear how the axis of the first linear region is both 45 degrees and 90 degrees to the axis of the second linear region. It appears claim 9 should depend from claim 7 instead and has been examined as such.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 3616

5. Claims 1-4, 6, 7, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by anticipated by Weber (U.S. Pat. No. 6,877,771 B2).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Weber discloses an inflatable curtain (Figure 2) and a gas generator (24) configured to inflate the inflatable element, the inflatable element defining at least first (42) and second (40) chambers for inflation by a gas from the gas generator, a gas supply duct (26) having an end outlet (100) aperture formed through an end wall of the gas supply duct so as to have a diameter smaller than the bore of the gas supply duct (Figure 3), and at least one side outlet aperture (102) formed through a side wall of the gas supply duct at a position substantially adjacent the end outlet aperture (Figure 3; substantially adjacent when aperture 102 is arranged closer to aperture 100 as disclosed in column 9, lines 46-64), the end outlet being configured to direct gas out of the gas supply duct in a first direction substantially orthogonal to a second direction of gas directed through the side outlet aperture (column 9, lines 46-64), wherein the gas supply duct is arranged to direct gas from the gas generator to the first chamber through the end outlet aperture, and direct gas from the gas generator to the second chamber through the side outlet aperture (Figure 2). The gas supply duct comprises a plurality of the side outlet apertures formed in the side wall (column 10, lines 12-15), and the plurality of side outlet apertures is arranged to direct gas out of the gas supply duct in a direction non-parallel with the direction of gas directed through the end outlet aperture (Figure 2 and column 10, lines 12-15). The inflatable element defines a gas flow passage (78) interconnecting the first and second chambers (Figure 2), and wherein at least one of the end outlet or side outlet apertures is arranged to direct gas along the flow passage (Figure 2). The gas supply duct has a curved or bent configuration (Figure 3), where it has first and second linear regions, the axis of the first linear region making an angle of approximately 90 degrees to the axis of the second linear region (Figure 3).

Art Unit: 3616

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being obvious over Weber.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Weber discloses the claimed invention as discussed above but does not specifically disclose that at least one of the end outlet and side outlet apertures arranged to direct gas along the flow passage is arranged to direct the gas in a direction angled at approximately 45 degrees to the axis of the flow passage, or that a first linear region of the gas supply duct makes an angle of approximately 45 degrees to the axis of a second linear region. However, Weber discloses in column 10, lines 16-19 that the gas guide can have a variety of bending schemes. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to bend the second linear region and angle the gas guide so that the side outlet directs gas along the flow passage at an approximately 45 degree angle while also directing it at a 90 degree angle

Art Unit: 3616

with respect to the end outlet. A change in the angle of a component is generally recognized as being within the level of ordinary skill in the art.

8. Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al. (U.S. Pub. No. 2001/0019201 A1).

Masuda et al. discloses an inflatable curtain (Figure 1) and a gas generator configured to inflate the inflatable element, the inflatable element defining at least first (13) and second (formed by 11 and 12) chambers for inflation by a gas from the gas generator, a gas supply duct (20) having an end outlet (24) aperture formed through an end wall of the gas supply duct (Figure 5), and at least one side outlet aperture (23) formed through a side wall of the gas supply duct at a position substantially adjacent the end outlet aperture (Figure 1), the end outlet being configured to direct gas out of the gas supply duct in a first direction substantially orthogonal to a second direction of gas directed through the side outlet aperture (Figure 1), wherein the gas supply duct is arranged to direct gas from the gas generator to the first chamber through the end outlet aperture, and direct gas from the gas generator to the second chamber through the side outlet aperture (Figure 1). The gas supply duct comprises a plurality of the side outlet apertures (22 and 23) formed in the side wall (Figure 1), and the plurality of side outlet apertures is arranged to direct gas out of the gas supply duct in a direction non-parallel with the direction of gas directed through the end outlet aperture (Figure 1). The inflatable element defines a gas flow passage (13) interconnecting the first and second chambers, and wherein at least one of the end outlet or side outlet apertures is arranged to direct gas along the flow passage (as shown in Figure 1, end aperture directs gas along the gas flow passage 13). The gas supply duct has a curved or bent configuration (Figure 1), where it has first and second linear regions, the axis of the first linear region making an angle of approximately 45 degrees to the axis of the second linear region (Figure 1).

Masuda et al. does not disclose that the end outlet aperture has a diameter smaller than the bore of the gas supply duct. However, it would have been an obvious matter of design choice to make the diameter smaller, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art.

Art Unit: 3616

*Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Takahara, Kumagai et al., and Steimke et al. disclose similar airbags.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew J. Brown whose telephone number is 571-272-1362. The examiner can normally be reached on Monday-Thursday from 8 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Drew J. Brown  
Examiner  
Art Unit 3616

db  
8/22/07

  
PAUL N. DICKSON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

8/22/07